

What is claimed is:

1. An information storage medium comprising:
audio/video (AV) data; and
interactive data for reproducing the AV data in an interactive mode,
5 wherein the interactive data comprises a plurality of ENAV units which are
smaller than a predetermined size.
2. The information storage medium of claim 1, wherein the interactive data
comprises link information between the AV data and the ENAV units, which is described
10 by using a structure of the AV data.
3. The information storage medium of claim 1, wherein the interactive data
comprises link information between the AV data and the corresponding ENAV units,
which is described using reproduction time information of the AV data.
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4. The information storage medium of claim 1, wherein each of the ENAV
units comprises at least one ENAV page containing synchronization information
indicating a time at which to display the ENAV page.
- 20 5. The information storage medium of claim 4, wherein the interactive data
comprises markup documents and markup resources linked to the markup documents,
wherein one of the markup documents comprises a startup file that contains the
link information, and
each of the markup documents corresponding to the ENAV pages comprises the
25 synchronization information.
6. The information storage medium of claim 5, wherein the AV data
comprises DVD-Video data, and

the link information and the synchronization information are described using a presentation time stamp of the DVD-Video data.

7. An information storage medium comprising:
5 audio/video (AV) data; and
interactive data for reproducing the AV data in an interactive mode,
wherein the interactive data comprises a plurality of ENAV units smaller than a
predetermined size, and
a starting page of each of the ENAV units is stored with a predetermined start file
10 name.

8. The information storage medium of claim 7, wherein each of the ENAV
units comprises at least one ENAV page, and
the start page is one of the ENAV pages.
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9. The information storage medium of claim 7, wherein the interactive data
comprises a markup document and markup resources linked to the markup document.

10. The information storage medium of claim 7, wherein the AV data
20 comprises DVD-Video data.

11. An information storage medium comprising:
audio/video (AV) data; and
interactive data for reproducing the AV data in an interactive mode,
25 wherein the interactive data comprises at least one ENAV page, and
the ENAV page comprises control command information regarding an ENAV
buffer for buffering the ENAV page.

12. The information storage medium of claim 11, wherein the control command information commands data stored in the ENAV buffer to be discarded.

13. The information storage medium of claim 11, wherein the interactive data is divided into a plurality of ENAV units containing the ENAV page.

14. The information storage medium of claim 13, wherein the control command information commands an ENAV unit stored in the ENAV buffer to be discarded and a next ENAV unit to be read into the ENAV buffer.

15. An apparatus for reproducing audio/video (AV) data in an interactive mode, the apparatus comprising:

an ENAV buffer buffering interactive data for reproducing the AV data in the interactive mode, where the interactive data is divided into a plurality of ENAV units smaller than a predetermined size; and

an ENAV buffer manager controlling the ENAV buffer to so that the interactive data are read into and discarded from the ENAV buffer in units of the EVAV units.

16. The apparatus of claim 15, wherein the ENAV buffer manager controls the ENAV buffer to read the ENAV units before the AV data is displayed, based on link information between the AV data and the ENAV units, which is described using a structure of the AV data.

17. The apparatus of claim 15, wherein the ENAV buffer manager controls the ENAV buffer to read the ENAV units before the AV data is displayed, based on link information between the AV data and the ENAV units, which is described using reproduction time information of the AV data.

18. The apparatus of claim 15, wherein the ENAV buffer manager controls the ENAV buffer to read a corresponding ENAV unit, based on synchronization information recorded in markup documents corresponding to ENAV pages.

5 19. The apparatus of claim 18, wherein the ENAV buffer manager controls the ENAV buffer to read a corresponding ENAV unit, based on the synchronization information and link information between the AV data and the ENAV unit.

20. The apparatus of claim 19, wherein the interactive data comprises
10 markup documents and markup resources linked to the markup documents,
wherein the markup document comprises a startup file including the link
information, and
each of the markup documents corresponding to the ENAV pages comprises the
synchronization information.

15 21. The apparatus of claim 19, wherein the AV data is DVD-Video data, and
the link information and the synchronization information are described by using a
presentation time stamp of the DVD-Video data.

20 22. An apparatus for reproducing audio/video (AV) data in an interactive
mode, the apparatus comprising:

an ENAV buffer buffering interactive data for reproducing the AV data in the
interactive mode, where the interactive data is divided into a plurality of ENAV units
smaller than a predetermined size; and

25 an ENAV buffer manager controlling the ENAV buffer so that, if a start page
having a predetermined file name is found in the interactive data, an ENAV unit
corresponding to the start page is read into the ENAV buffer.

23. The apparatus of claim 22, wherein at least one of the ENAV units comprises at least one ENAV page, and the start page is one of the ENAV pages.

5 24. The apparatus of claim 22, wherein the interactive data comprises a markup document and markup resources linked to the markup document.

25. A method of reproducing audio/video (AV) data in an interactive mode, the method comprising:

10 (a) buffering interactive data for reproducing the AV data in the interactive mode, where the buffering comprises reading and discarding the AV data in units of ENAV units smaller than a predetermined size; and

(b) reproducing the AV data in the interactive mode by using the buffered interactive data.

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26. The method of claim 25, wherein (a) comprises reading the ENAV units before the AV data is displayed, based on link information between the AV data and the ENAV units, which is described using a structure of the AV data.

20 27. The method of claim 25, wherein (a) comprises reading the ENAV units before the AV data is displayed, based on link information between the AV data and the ENAV units, which is described using reproduction time information of the AV data.

25 28. The method of claim 25, wherein (a) comprises reading a corresponding ENAV unit, based on synchronization information recorded in markup documents corresponding to ENAV pages.

29. The method of claim 28, wherein (a) comprises reading a corresponding ENAV unit, based on the synchronization information and link information between the AV data and the ENAV units.

5 30. The method of claim 29, wherein the interactive data comprises a markup document and markup resources linked to the markup document,
wherein the markup document comprises a startup file which includes the link information, and
each of the markup documents corresponding to the ENAV pages comprises the
10 synchronization information.

31. The method of claim 30, wherein the AV data is DVD-Video data, and the link information and synchronization information are described by using a presentation time stamp of the DVD-Video data.